



# Solar Decathlon

Energy We

Can Live

With

October/November 2001

## Director's Note

From meetings with the National Park Service (NPS) to a new "village" layout to sponsorship updates: I've got lots of news from Washington. First and foremost, NPS accepted and approved our permit for the National Mall on September 19, 2001. It's official! We will have the Mall for a three-week period from Thursday, September 19 through Thursday, October 10, 2002, to set up, conduct, and disassemble our competition.

We have already met with NPS three times and each time we come away with a better understanding of each other's requirements. In our meetings, NPS staff from the Washington, D.C., offices have been helpful and accommodating. Our event marks the first time anyone has proposed building a village on the Mall, so you can imagine their trepidation. I assure you that we are all working to make the Solar Decathlon a safe, spectacular event, worthy of display on a national stage.

I'd also like to inform you of a new location development; our event site has moved three blocks toward the Capital between the Air and Space Museum and the National Gallery of Art (located between 4th and 7th Streets). The National Park Service will be re-seeding the area in front of the Smithsonian in 2002, so they have moved us closer to the Capital. Our new site is excellent, if not better! I walked around this new site the other day and noticed lower tree and building heights on the south side, which improves solar access. However, the land slopes slightly toward the Capital, from west to east. It should have little impact other than the need to level your houses more than expected. I will get back to you with the actual grade.

The village layout has also been updated. Teams agreed unanimously to a new village design (see diagram, page 3). This layout, with two cross streets, six middle lots, and four end lots, offers better symmetry and more corner lots. A lottery was conducted for the three new teams to select their lots. I am very pleased with this revised layout and the new teams' locations.

With just a year to go before the event, I have been closely monitoring the local weather. The weather in Washington these past two months has been unusually dry. Rainfall in October was two inches below normal. I have weather reports from *The Washington Post* each day from mid-September through October 9th. These weather pages will be copied and then sent to you. Of course, you must still design to 30-year averages, but this supplemental weather data is informative.

Finally, I'd like to update you on sponsorships. I met with BP Solar associates last week. I am pleased to announce their sponsorship includes providing photovoltaic panels to all teams at cost, which ranges between \$2.50/watt and \$3.00/watt. This offer includes all product lines, from their laser-grooved cells made in Spain to their thin-film modules made in Virginia. I have also renewed discussions with TH!NK Mobility about acquiring electric vehicles. They are now interested in working with us. I hope to have definitive information soon.

*Richard King*



## The Solar Decathlon Web Forum is Now Live!

Visit this on-line discussion forum and exchange your ideas with other teams at [http://www.eren.doe.gov/solar\\_decathlon/intro.html](http://www.eren.doe.gov/solar_decathlon/intro.html)

## 15 Minutes

Publicity can reward your team's hard work and dedication to this event. Visibility can help you secure sponsors for this competition. The logic is easy to follow: you need money to complete your project, money comes from sponsors, sponsors give money partly to garner visibility.

A few tips if you've just started thinking about visibility:

- Add someone to your team from mass communications, marketing, or journalism. Include them in planning sessions and solicit their advice.
- Start early. With a publicity plan and maybe a few news clips to show off, potential sponsors are more likely to take you seriously. The plan should include your publicity objectives, the audiences you're trying to reach, and the messages you plan to convey, plus some specific tasks with projected due dates. And don't forget a budget.
- You'll also need a flyer or brochure for potential sponsors, the news media, and important visitors. It should include a description of your project, a sketch of your design, information on your team members, a photo of your team, and any information you think makes your team or project a strong competitor. Get help from people who understand publication design.
- Get a Web site up and in good form. Include much the same information as the brochure, and keep it updated. Again, unless you're an expert in Web site design, get help.
- Think visually when it comes to designing your home. A unique shape or color scheme will attract more media and more visitors.
- Use your sponsors' names everywhere you can—in your news releases, brochures, and Web site—and make it very clear in your public relations plan how you intend to give sponsors visibility.
- Have some business cards made for team members who will be meeting with potential sponsors and the news media. Include their telephone, cell phone, fax, e-mail, and Web site address.

- Document the building of your home with still photographs and video. You will likely find many uses for the images, and the Solar Decathlon public outreach team could use the material in their publicity efforts. Some news media will want to show the house in different stages of development.
- Designate one or more media spokespersons. These could be public relations people or another member of the team who is articulate and not shy in front of cameras. Make sure they practice doing news media interviews.
- Plan to issue news releases at appropriate points in the process. For example, announce your intent to enter the contest, the completion of your house, your team's departure for Washington, D. C., and the final results of the contest.
- Create an event to generate publicity and raise funds. Some ideas: hold a "house raising" to put the walls up and lift the roof on, name the house in honor of a prominent local or national figure and hold a dedication ceremony, or commit the house to be a visitor center in a local park after the contest and hold an event before the contest to symbolically turn over the key.
- Work in partnership with your university's public relations department to maximize coverage. Ask them for advice and assistance with distribution of news releases or contacting reporters who might be interested.
- Ask your university's alumni affairs department to notify alumni about the project, the need for sponsors, and ways they can help. Perhaps Washington, D.C.-based alumni would be willing to help with logistics or visit the team during the contest to show support.

That's enough to get you started. Now, make Andy Warhol proud and get your team 15 minutes of fame, hopefully more.

*Christopher Powers  
External Affairs Officer  
DOE Golden Field Office*

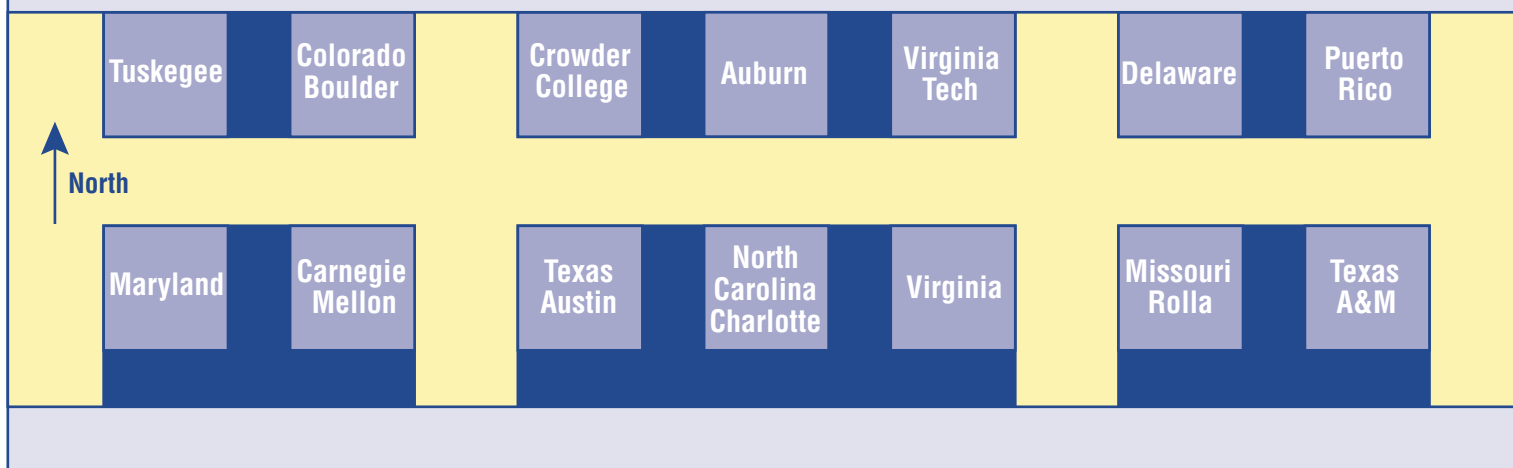


## Updates — School Visits

The Solar Decathlon Organizers will be visiting each school to see your progress, to discuss the event, and to answer questions. So far, we have visited the University of Maryland, University of Delaware, University of Virginia, Texas A & M University, and the University of Texas at Austin.

In July and August of next year, the Organizers plan to have on-site inspections at the universities and colleges. The Organizers would like to make a final visit to each team before the competition to ensure all is in order for the September start date.

## New Layout of Village as of October 2001



*This new layout for the solar houses on the National Mall includes the addition of our three new teams: Auburn University, University of Delaware, and University of North Carolina—Charlotte.*

### Web Sites

Thanks to all of the teams for submitting the Internet addresses for their Web sites. Everyone did a great job. Your sites will play an important role in publicity, not just for each team but also for the Solar Decathlon as a whole. The pass/fail judging criteria for this portion of the Graphics and Communications contest consisted of two standards:

- The Web site was live by October 1, 2001
- The Web site consisted of at least three pages.

A team of judges at NREL reviewed each site carefully and provided feedback based on the full criteria that will be in effect for the competition in 2002. Sites were not scored on these criteria at this time. The judges reviewed the sites to provide you with a sense of what they'll be looking for in 2002. Each site was also reviewed to ensure compliance with the minimum standards indicated on the subsite at [http://www.eren.doe.gov/solar\\_decathlon/web.html](http://www.eren.doe.gov/solar_decathlon/web.html). Sites were not scored on compliance or noncompliance with these standards. However, sites must comply with these standards before we can link to them from the main Solar Decathlon site. We would like to receive word from each team by November 16, 2001 that the changes concerning code/EREN/ADA compliance have been made. At that time, we will review your sites again. Those that meet minimum standards will be linked to the main Solar Decathlon site. For those that do not meet these standards, we will continue to work with the teams until the requirements have been met. When compliance is achieved, the sites will be connected to the main site. If you have any questions, please email Ruby Nahan at [ruby\\_nahan@nrel.gov](mailto:ruby_nahan@nrel.gov).

*Ruby Nahan*

### Highlights of Rules and Regulations Changes

The Solar Decathlon Rules and Regulations Committee fielded close to a hundred questions from teams on the rules and regulations for this event. The committee used these questions as well as feedback from committee meetings to clarify and revise the rules for the Solar Decathlon.

This article highlights the differences between the January 12, 2001 version of the rules and regulations and the October 31, 2001 version. Some of the

changes have already been addressed in the amendments and the questions for clarification posted on the Solar Decathlon Web site. We strongly encourage all teams to closely read this latest version as if it were a new document, so that all teams are familiar with the changes.

#### Administration and Regulations

One of the most notable changes to the revised document is the addition of an "observer" to each house (see the Administration section). This

*Continued on back page*



*Continued from previous page*

individual, assigned to each team by the Solar Decathlon Organizers, will observe team activity during the contests. The observer will verify task completion and will report any observed violation of the rules and regulations to the Chief Inspector. Teams should anticipate that the observer will spend a significant portion of the contest hours as an occupant in the house.

The section under Regulations—The Site, saw the most changes in the document. For example, vegetation specifications were added for participants who wish to landscape their site. A construction regulation was also added to define National Park Service expectations for the assembly of your homes. The Solar Envelope is no longer placed in a 100 ft by 75 ft lot; the lot size has returned to the original volume in which you were permitted to build. We removed the lot requirement because of concerns about shading as well as space between houses.

Also under Regulations—The Site, we discuss the Americans with Disabilities Act (ADA) requirements to help clarify what is necessary for this contest. We have added an ADA guideline in the resources section of the Web site ([http://www.eren.doe.gov/solar\\_decathlon/resources.html](http://www.eren.doe.gov/solar_decathlon/resources.html)).

Under Regulations—Electrical, Code Compliance we have removed the requirement that teams meet IRC2000 electrical code requirements and have instead required compliance with the National Electric Code (NEC1999). We felt the NEC addresses the electrical safety concerns far better than the electrical section of the IRC2000, for the purposes of this contest.

Requirements concerning wastewater were also added to the Regulations—Water Supply & Distribution section. These additions address how water used for the contests and cleaning purposes will be stored.

## Contests

Two contests—Contest 2: Design Presentation and Simulation and Contest 5: Refrigeration—experienced a number of changes. In Contest 2, the Organizers will evaluate how accurately the simulation and building plans approach the building presented at the competition, with the exception of the thermal- and electric-storage systems. These systems are allowed to be undersized from the annual simulation results to keep unreasonably-sized and costly storage systems to a minimum. We recognize that most off-grid housing has fuel-type backup systems to meet the highest loads the house may experience annually. Also in Contest 2, we have asked the decathletes to use specific weather files for the simulation that is submitted to the Organizers. These weather files are available in the resources section of the Solar Decathlon Web site.

## Upcoming Issues

A future issue of the newsletter will focus on the jury members that have been selected for this competition. This jury will judge the design components of the contests. We will feature a profile on each member.

### Solar Decathlon Jury

Dr. J. Douglas Balcomb, Research Fellow  
Center for Buildings and Thermal Systems  
National Renewable Energy Laboratory

Dr. Ed Jackson Jr., Director  
Center for Building Performance  
American Institute of Architects

Mr. Edward Mazria, Architect  
Mazria, Riskin & Odems, Inc.

Mr. Glenn Murcutt, Architect and Visiting Professor  
Yale University School of Architecture

Ms. Stephanie Vierra, Executive Director  
Association of Collegiate Schools of Architecture

In Contest 5, we added a minimum freezer volume requirement. We have also asked decathletes to demonstrate that these units meet Association of Home Appliance Manufacturers (AHAM) standards for the volume measurements for the refrigerator and freezer compartments. Compliance can be demonstrated through a manufacturers spec sheet or submission of measurements of the appliance in question, according to the AHAM standard. This requirement was modified because some manufacturers falsely advertise the interior volumes of their refrigerator/freezers, and also to provide a standard for those teams building custom units.

For the complete Solar Decathlon Rules and Regulations document, visit the Web site at [http://www.eren.doe.gov/solar\\_decathlon/rules\\_regs.html](http://www.eren.doe.gov/solar_decathlon/rules_regs.html).

*Gretchen Menand and  
Mark Eastment*

Produced for the U.S. Department of Energy  
by the National Renewable Energy Laboratory,  
a DOE national laboratory

Printed with a renewable-source ink on  
paper containing at least 50% wastepaper,  
including 20% postconsumer waste

DOE/GO-102001-1495  
October/November 2001

# Solar Decathlon

